Appl. No. 10/815,297 Amdt. dated April 18, 2007 Reply to Final Office Action of August 23, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1-11. (Canceled)
- 12. (Previously presented) An isolated polypeptide comprising an alpha subunit of a Kv potassium channel, the polypeptide:
- (i) forming, with at least one additional Kv alpha subunit, a Kv potassium channel having the characteristic of voltage-gating; and
- (ii) comprising an amino acid sequence having at least 90% sequence identity to SEQ ID NO:3.
- 13. (Previously presented) The polypeptide of claim 12, wherein the amino acid sequence has at least 95% sequence identity to SEQ ID NO:3.
- 14. (Original) The polypeptide of claim 12, wherein the polypeptide has a molecular weight of between about 58 kD to about 68 kD.
 - 15. (Canceled)
- 16. (Original) The polypeptide of claim 12, wherein the polypeptide has an amino acid sequence of SEQ ID NO:3.
- 17. (Original) The polypeptide of claim 12, wherein the polypeptide comprises an alpha subunit of a homomeric potassium channel.
- 18. (Previously presented) The polypeptide of claim 12, which comprises an alpha subunit of a heteromeric potassium channel.

19-38. (Canceled)